

Serial No.: 10/806,469  
 Attorney Docket No. P06276-US  
 (CLO.012)

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**LISTING OF THE CLAIMS:**

1. (Previously presented) An electronic component, comprising:
  - a piezo-electric resonator which is formed on an element substrate and which includes a piezo-electric film, said piezo-electric resonator obtaining a signal having a predetermined resonant frequency by a bulk wave propagating through said piezo-electric film;
  - a packaging substrate on which said piezo-electric resonator is mounted by a face-down bonding through an electrically connected projecting portion;
  - a sealing member which is fixed on said packaging substrate and which seals said piezo-electric resonator; and
  - a distance between a surface of said piezo-electric resonator facing said packaging substrate and a surface of said packaging substrate facing said piezo-electric resonator being not larger than 100  $\mu\text{m}$ .
  
2. (Previously presented) An electronic component, comprising:
  - a piezo-electric resonator which is formed on an element substrate and which includes a piezo-electric film, said piezo-electric resonator obtaining a signal having a predetermined resonant frequency by a bulk wave propagating through said piezo-electric film;
  - a packaging substrate on which said piezo-electric resonator is mounted by a face-down bonding through an electrically connected projecting portion;
  - a sealing member which is fixed on said packaging substrate and which seals said piezo-electric resonator; and

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a maximum diameter of said electrically connected projecting portion being not larger than 150  $\mu\text{m}$  when said electrically connected projecting portion is connected to said packaging substrate.

3. (Original) An electronic component as claimed in claim 2, wherein the number of said electrically connected projecting portion formed on said piezo-electric resonator is eight.

4. (Previously presented) An electronic component, comprising:

a piezo-electric resonator which is formed on an element substrate and which includes a piezo-electric film, said piezo-electric resonator obtaining a signal having a predetermined resonant frequency by a bulk wave propagating through said piezo-electric film;

a packaging substrate on which said piezo-electric resonator is mounted by a face-down bonding through an electrically connected projecting portion;

a sealing member which is fixed on said packaging substrate and which seals said piezo-electric resonator; and

a distance between a surface of said piezo-electric resonator facing said sealing member and a surface of said sealing member facing said piezo-electric resonator being not larger than 150  $\mu\text{m}$ .

5. (Original) An electronic component as claimed in claim 4, wherein said surface of said piezo-electric resonator facing said sealing member and said surface of said sealing member facing said piezo-electric resonator are coupled with each other.

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6. (Original) An electronic component as claimed in claim 4, wherein a buffer is located for burying a space between said piezo-electric resonator and said packaging substrate.
7. (Original) An electronic component as claimed in claim 4, wherein a buffer is located for burying a space between said piezo-electric resonator and said sealing member.
8. (Previously presented) An electronic component as claimed in claim 7, wherein said buffer comprises an adhesive for fixing said piezo-electric resonator and said sealing member.
9. (Previously presented) An electronic component as claimed in claim 1, wherein said electrically connected projecting portion comprises gold.
10. (Original) An electronic component as claimed in claim 1, wherein a couple of said piezo-electric resonators are mounted on said packaging substrate, one being a transmission side filter for processing a transmission signal while another being a reception side filter for processing a reception signal.
11. (Previously presented) An electronic component as claimed in claim 1, wherein said piezo-electric resonator comprises an SMR type piezo-electric resonator.

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12. (Previously presented) An electronic component as claimed in claim 1, wherein said distance between the surface of said piezo-electric resonator facing said packaging substrate and the surface of said packaging substrate facing said piezo-electric resonator is equal to or less than 50  $\mu\text{m}$ .

13. (Previously presented) An electronic component as claimed in claim 1, wherein said distance between the surface of said piezo-electric resonator facing said packaging substrate and the surface of said packaging substrate facing said piezo-electric resonator is equal to or less than 25  $\mu\text{m}$ .

14. (Previously presented) An electronic component as claimed in claim 2, wherein said maximum diameter of said electrically connected projecting portion is equal to or less than 100  $\mu\text{m}$  when said electrically connected projecting portion is connected to said packaging substrate.

15. (Previously presented) An electronic component as claimed in claim 4, wherein said distance between the surface of said piezo-electric resonator facing said sealing member and the surface of said sealing member facing said piezo-electric resonator is equal to or less than 100  $\mu\text{m}$ .

16. (Previously presented) An electronic component as claimed in claim 1, wherein a maximum diameter of said electrically connected projecting portion is equal to or less than 150  $\mu\text{m}$  when said electrically connected projecting portion is connected to said packaging substrate.

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17. (Previously presented) An electronic component as claimed in claim 1, wherein a distance between a surface of said piezo-electric resonator facing said sealing member and a surface of said sealing member facing said piezo-electric resonator is equal to or less than 150  $\mu\text{m}$ .

18. (Previously presented) An electronic component as claimed in claim 1, wherein a maximum diameter of said electrically connected projecting portion is equal to or less than 150  $\mu\text{m}$  when said electrically connected projecting portion is connected to said packaging substrate, and

wherein a distance between a surface of said piezo-electric resonator facing said sealing member and a surface of said sealing member facing said piezo-electric resonator is equal to or less than 150  $\mu\text{m}$ .